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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RAMOS, JAVIER J

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,983	Applicant(s) NABEMOTO ET AL.	
	Examiner JAVIER J. RAMOS	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7 and 9 is/are rejected.
- 7) ☒ Claim(s) 5 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1-5, 7, 9 and 11 are pending in this application.
2. Claims 1, 4, 5, 7 and 11 have been amended and claims 6, 8, 10 and 12-19 have been cancelled [1/2/09].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 3, 4, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamagaki et al. (US 5,452,105) in view of Kanno et al. (US 6,263,118 B1) and Tomita et al. (US 2003/0100354 A1).**

5. In regards to claims 1 and 7, Tamagaki et al. (hereafter Tamagaki) teaches an image processing apparatus (**Figs. 1 and 2**) and an image processing method (**Fig. 8**), comprising: an image reading unit configured to receive a medium (**Fig. 2, Object 22, scanner unit**); a mark detecting unit (**Fig. 2, Object 22, scanner unit**) detecting the combination instruction mark present in the predetermined position (**Fig. 8, Step S44, retrieve marks; Col. 19, Lines 47-60, the presence of marks dictates the image joining process**); and an

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image combining unit (**Fig. 1, Object 48, joint-portion processing section**) combining a front side sliced image (**Figs. 9(a) and 9(b), object 64**) and a rear side sliced image (**Figs. 9(a) and 9(b), object 65**) sliced from predetermined positions of the front side image and the rear side image (**Col. 12, Lines 37-44, the slices are the partial image data**) in a predetermined direction (**Figs. 9(a), 9(b) and 10, refer to the direction arrows**) to obtain one image when the combination instruction mark is detected (**Figs. 9(c) and 10, Object 66 and the combined image composing objects 67a-67f**).

It is noted however, that Tamagaki does not specifically teach an image reading unit configured to read a front side image and a rear side image from a front side and a rear side of the original, respectively. Though Tamagaki does teach reading multiple images (Col. 12, Lines 37-44)

In analogous art, Kanno et al. (hereafter Kanno) teaches an image reading unit (**Fig. 2, Object 4, scanner section**) configured to read a front side image and a rear side image from a front side and a rear side of the original, respectively (**Figs. 31C, 31D, 33 and 35A, 36A; Col. 29, Lines 27-65, the device can read a double sided document and form multiple images on a single sheet**).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Tamagaki by enabling the reading unit to read a front side image and a rear side image from a front side and a rear side of a medium, respectively, as taught by Kanno, in order to reduce the amount of paper used in copying or printing operation (**Kanno: Col. 1, Lines 17-25**).

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Further, Tamagaki, as modified by Kanno, does not specifically teach a medium including a colorless and transparent carrier sheet that includes a combination instruction mark in a predetermined position thereon and holds an original therein. It is noted however that Tamagaki, as modified by Kanno, teaches a combination instruction mark in a predetermined position being used in the combination of multiple scanned images (**Fig. 8, Step S44, retrieve marks; Col. 19, Lines 47-60, the presence of marks dictates the image joining process**).

In analogous art, Tomita et al. (hereafter Tomita) teaches a medium including a colorless and transparent carrier sheet (**Fig. 1, Object 1, document carrier sheet; [0044]**) that includes an instruction mark in a predetermined position thereon (**Figs. 1 and 2, Objects 5 and 6; [0051], the seal member and the document number**) and holds an original therein (**[0044], a document is supported in the carrier sheet**).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Tamagaki, as modified by Kanno, by including instruction marks on a colorless and transparent carrier sheet that holds an original to be scanned, as taught by Tomita, in order to avoid sheet feeding malfunctions (**Tomita: [0005]-[0007]**) and to identify attributes of the document in the carrier sheet (**[0051]**).

6. In regards to claim 3, Tamagaki teaches the image combining unit finds effective ranges in the front side image and the rear side image (**Col. 20, Lines**

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24-35, a magnification operation takes place that changes the range of the images captured), selects a larger one of the effective ranges (Col. 20, Lines 24-35, variable magnification is carried out in accordance with the largest sized copy sheets available), determines a formal size larger than the selected effective range and closest to a size of the effective range as a size of images (Col. 20, Lines 24-35, selects the largest sized copy sheets available), and slices images of the determined size from the front side image and the rear side image to combine the images into one image (Col. 20, Lines 7-24, partial document data is combined based on the results of the positioning).

7. In regards to claim 4, Tamagaki teaches the mark detecting unit sets each of the front side image and the rear side image as individual one image when the combination instruction mark is not detected **(Fig. 8, Step S45, detect marks with a “NO” output; Col. 19, Lines 47-61, the joining operation is stopped when marks are not detected and therefore each partial image will stay an individual image).**

8. In regards to claim 9, Tamagaki teaches the medium includes a vertical reference line defining a position of a reference in a conveying direction **(Fig. 9(a), Object 63, the mark which is an arrow)**, and wherein the vertical reference line is used as a reference for slicing of the front side sliced image and the rear side sliced image from the front side image and the rear side image and combining of the front side sliced image and the rear side sliced image **(Col. 20,**

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Line 48 to Col. 21, Line 9, the arrow mark is used in combining the images as a reference mark for positioning the images together).

9. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tamagaki et al. (US 5,452,105) in view of Kanno et al. (US 6,263,118 B1) and Tomita et al. (US 2003/0100354 A1), as applied to claim 1, in further view of Toshihiro (JP 9-200507).

A translation of Toshihiro, provided in the applicant's IDS dated 8/3/06, is relied upon in the following rejection when citing the reference.

10. In regards to claim 2, Tamagaki et al. (hereafter Tamagaki), as modified by Kanno et al. (hereafter Kanno) and Tomita et al. (hereafter Tomita), teaches the front side image (Kanno: Figs. 33 and 35A, right side) and the rear side image (Kanno: Figs. 33 and 35A, reverse side) as a reference when the combination instruction mark is detected (Tamagaki: Fig. 8, Step S44, retrieve marks; Col. 19, Lines 47-60, the presence of marks dictates the image joining process).

It is noted however, that Tamagaki, as modified by Kanno and Tomita, does not specifically teach a tilt correcting unit correcting a tilt with a vertical reference line or a horizontal reference line present in the predetermined positions.

In analogous art, Toshihiro teaches a tilt correcting unit **(Fig. 1, Object 22, scanner section)** correcting a tilt with a vertical reference line or a horizontal

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reference line present in the predetermined positions (**Figs. 3a-4b; Page 2, [0013] to Page 4, [0018], the tilt is corrected with reference to an angle of inclination that uses a reference line position to compute**).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Tamagaki, as modified by Kanno and Tomita, by correcting the tilt of an image with a vertical reference line or a horizontal reference line, as taught by Toshihiro, in order to align multiple input images within a set of input images with the same vertical orientation (**Toshihiro: Page 2, Lines 1-10**).

Allowable Subject Matter

11. Claims 5 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Tamagaki et al. (US 5,452,105) neither alone, nor in combination with any of the other cited prior art, specifically teaches a non-combination instruction mark that neglects the existing combination instruction marks and sets both captured front and rear side images to be individual images and not to be combined.

It is noted, however, by the examiner that it is well known in the art for watermarks, and the like, to be used to inhibit copying functions of image forming devices, such as in Matsunoshita (US 2003/0179412 A1).

Response to Arguments

12. Applicant's arguments with respect to claims 1-5, 7, 9 and 11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAVIER J. RAMOS whose telephone number is (571) 270-3947. The examiner can normally be reached on Monday to Thursday - 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark K. Zimmerman can be reached on (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. J. R./
Examiner, Art Unit 2625

/Mark K Zimmerman/
Supervisory Patent Examiner, Art Unit 2625